



**A. Burkitbayev Institute of Power and Mechanical Engineering**

**Department of «Mechanical engineering»**

**EDUCATIONAL PROGRAM**

**8D07111 - Digitalization of engineering manufacturing**

**Code and classification of the field of education:** 8D07-Engineering, manufacturing and construction industries

**Code and classification of training directions:** 8D071-Engineering and engineering affairs

**Group of educational programs:** D103-Mechanics and metal working

**Level based on NQF:** 8

**Level based on IQF:** 8

**Study period:** 3 years

**Amount of credits:** 180

**Almaty 2025**

Educational program **8D07111 - Digitalization of engineering**

code and name of educational program

**manufacturing**

was approved at the meeting of K.I. Satbayev KazNRTU Academic Council

Minutes 10 dated « 06 » 03 2025.






was reviewed and recommended for approval at the meeting of K.I. Satbayev KazNRTU Educational and Methodological Council

Minutes 3 dated « 20 » 12 2024.

Educational program **8D07111 - Digitalization of engineering**

code and name of educational program

**manufacturing** developed by Academic committee in the direction of "8D071-Engineering and engineering trades"

Full name	Academic degree/ academic title	Position	Workplace	Signature
<b>Teaching staff:</b>				
Nugman E.Z.	Doctor PhD, Associate Professor	Head of the Department of "Mechanical Engineering"	Institute of Energy and Mechanical Engineering named after A.Burkitbaev	
Kerimzhanova M.F.	Candidate Technical Sciences, Docent	of Professor	Department of Mechanical Engineering	
Uderbayeva A.E.	Doctor PhD	Assoc. Professor	Department of Mechanical Engineering	
<b>Employers:</b>				
Andreev V.I.		General Director	Kazecotech STE LLP	
<b>Students</b>				
Myrzakhan A.		1st year doctoral student	Department of "Mechanical Engineering"	

## General information

№	Field name	Comments
1	Code and classification of the field of education	8D07- Engineering, manufacturing and construction industries
2	Code and classification of training directions	8D071- Engineering and engineering affairs
3	Educational program group	D103- Mechanics and metal working
4	Educational program name	8D07111-Digitalization of engineering manufacturing
5	Short description of educational program	The professional activity of the doctoral student is aimed at developing a strategy and design goals, analyzing technical information, modeling objects and processes using computer-aided design software packages, conducting research in the field of additive manufacturing. Doctoral students will gain knowledge of effective methods of solving problems of technology, economics and management; they will acquire the skills and abilities of mathematical, physical and computer modeling of additive technological processes, conducting research with the search for optimal solutions when creating competitive products.
6	Purpose of EP	Training of competitive and qualified personnel with high spiritual and moral qualities, capable of solving research and design tasks, as well as developing high-quality and inclusive education in the context of sustainable development of the engineering industry.
7	Type of EP	Innovative
8	The level based on NQF	8
9	The level based on IQF	8
10	Distinctive features of EP	-
11	Education form	full-time
12	Period of training	3 years
13	Amount of credits	180
14	Languages of instruction	Russian, Kazakh
15	Academic degree awarded	Doctor of Philosophy PhD
16	Developer(s) and authors	The educational program was developed by the academic committee on direction "8D071-Engineering and Engineering affairs"